

528 CMR 10.00: POWER PIPING

10.00: Power piping

The Bureau of Pipefitters and Refrigeration Technicians adopted 528 CMR 10.00: Power Piping by incorporating (ANSI/ASME B 31.1) the American National Standard Code for Pressure Piping, 1996 Edition--Part 6, as published by the American Society of Mechanical Engineers, 345 East 47th Street, New York, N.Y.

528 CMR 10.00 is available as published in Massachusetts Register 416, from ASME, or as it is on file with the Regulations Division of the Secretary's of State's Office. It is not reprinted here.

528 CMR 11.00: PREREQUISITES FOR EXAMINATIONS FOR PIPEFITTERS, REFRIGERATION TECHNICIANS, AND SPRINKLER SYSTEMS

11.01: Pipefitters

(1) All completed and approved applications for examination shall be filed with the Bureau 30 days before the day of examination.

(2) Every applicant for a journeyman pipefitter's license must be a high school graduate or possess a state equivalency certificate. Furthermore, each applicant:

(a) Shall have worked for not less than 6,000 hours in Massachusetts as an apprentice or trainee and have successfully completed 350 hours of A.S.M.E. Code requirements before being eligible to take the examination; or

(b) Shall have completed successfully not less than 1,000 hours of study in a pipefitter's course, of which 700 hours are practical, shop-related work; in addition, the applicant shall have completed satisfactorily 200 hours of A.S.M.E. Code requirements at a state, municipal or private school accredited by a recognized accrediting agency or licensed by the Massachusetts Department of Education. Furthermore, he shall have completed 2,000 actual work hours as an apprentice or trainee, such work time to be verified by a licensed employer; or

(c) Shall have completed successfully not less than 500 hours of study in a pipefitter's course of which 250 hours are practical, shop-related work; in addition, the applicant shall have completed satisfactorily 200 hours of the A.S.M.E. Code requirements at a state, municipal, or private school accredited by a recognized accrediting agency or licensed by the Massachusetts Department of Education. Furthermore, he shall have completed 4,000 actual working hours as an apprentice or trainee, such work time to be verified by a licensed employer; or

(d) May be admitted for examination as a journey man by a majority vote of the Bureau of Pipe fitters and Refrigeration Technicians:

1. By possessing qualifications other than those specified herein; OR

2. By possessing a pipefitter's license or certificate from any other state or foreign country without serving the required time as an apprentice as specified in these rules.

(3) Candidates for examination must pass a written examination and must receive 70% or better on each portion of the examination to qualify for a license.

(4) Applicants for a master pipefitter's license shall have had a Massachusetts journeyman pipefitter's license for not less than 2,000 hours and shall have completed not less than 100 hours of advanced pipefitter theory and 100 hours of the A.S.M.E. Code requirements in a day or night

course at a state, municipal or private school accredited by a recognized accrediting agency or licensed by the Massachusetts Department of Education before being eligible for examination.

(5) For the purpose of computing the requirement for a student or graduate of a pipefitter technician course accredited by a recognized accrediting agency or licensed by the Massachusetts Department of Education, the director of the school shall verify the transcript of the actual attendance and grade.

(6) Master pipefitter license holders shall prominently display their master pipefitter's license number on all commercial vehicles, offers, invoices, installation drawings, and on all stationary used in their business. The lettering of the license number required to be displayed on all commercial vehicles used in the master pipefitter's business shall be visible, legible and prominently displayed on vans, trucks, and doors of stake body trucks.

11.02: Refrigeration Technicians / Contractor

(1) All completed and approved applications for examination shall be filed with the Bureau 30 days before the day of examination.

(2) Every applicant for a refrigeration technicians license must be a high school graduate or possess a state equivalency certificate. Further more, each applicant shall have:

(a) worked for not less than 6,000 hours in Massachusetts as an apprentice or trainee and have successfully completed 100 hours of the 522 CMR 9.00 Code and training from the rules and regulations from national codes as may be necessary to effectuate the licensing provisions of 528 CMR 11.00, including codes resulting from the Clean Air Act and recommendations of the National Academy of Science for the safe handling and storage of chlorofluorocarbon materials, to protect the earths ozone layer and 150 hours of the Massachusetts Electrical Code training before being eligible to take the examination; or

(b) successfully completed not less than 1,000 hours of study in a refrigeration technician course, of which 700 hours are practical, shop-related work; 100 hours of the 522 CMR 9.00 Code and training from the rules and regulations from national codes as may be necessary to effectuate the licensing provisions of 528 CMR 11.00, including codes resulting from the Clean Air Act and recommendations of the National Academy of Science for the safe handling and storage of chlorofluorocarbon materials, to protect the earths ozone layer, and 100 hours of the Massachusetts Electrical Code training at a state, municipal, or private school accredited by a recognized accrediting agency or licensed by the Massachusetts Department of Education. Furthermore, the applicant shall have completed 2,000 actual work hours as an apprentice or trainee, such work time to be verified by a licensed employer; or

(c) successfully completed not less than 500 hours of study in a refrigeration technician course of which 250 hours are practical, shop-related work; 100 hours of the 522 CMR 9.00 Code; and training from the rules and regulations from national codes as may be necessary to effectuate the licensing provisions of 528 CMR 11.00, including codes resulting from the

Clean Air Act and recommendations of the National Academy of Science for the safe handling and storage of chlorofluorocarbon materials, to protect the earth's ozone layer, 100 hours of the Massachusetts Electrical Code training at a state, municipal, or private school accredited by a recognized accrediting agency or licensed by the Massachusetts Department of Education. Furthermore, the applicant shall have completed 4,000 actual working hours as an apprentice or trainee, such work time to be verified by a licensed employer; or

(3) Applicants may be admitted for examination as a refrigeration technician by a majority vote of the Bureau of Pipefitters and Refrigeration Technicians:

(a) By possessing qualifications other than those specified herein; or

(b) By possessing a refrigeration technicians license or certificate from any other state or foreign country without serving the required time as an apprentice as specified in 528 CMR 11.00.

(c) For the purpose of computing the requirement for a student or graduate of a refrigeration technician course at a state, municipal or private school accredited by a recognized accrediting agency or licensed by the Massachusetts Department of Education, the director of the school shall verify the transcript of the actual attendance and the grades of the applicant.

(4) Candidates for examination must pass a written examination and must receive 70% or better to qualify for a license.

(5) Applicants for a refrigeration contractors license shall have had a Massachusetts refrigeration technicians license for not less than 2,000 hours and shall have completed not less than 100 hours of advanced refrigeration technician theory and training from the rules and regulations to effectuate the licensing provisions of 528 CMR 11.02, including codes resulting from recommendations of the National Academy of Science for the safe handling and storage of chlorofluorocarbon materials to protect the earth's ozone layer and 100 hours training in each of the following code requirements: 522 CMR 9.00 and the Massachusetts Electrical Code in a day or night course at a state, municipal, or private school accredited by a recognized accrediting agency or licensed by the Massachusetts Department of Education before being eligible for examination.

Refrigeration Contractor license holders shall prominently display their master Refrigeration Contractor's license number on all commercial vehicles, offers, invoices, installation drawings, and on all stationary used in their business. The lettering of the license number required to be displayed on all commercial vehicles used in the Refrigeration Contractor's business shall be visible, legible and prominently displayed on vans, trucks, and doors of stake body trucks.

11.03: Sprinkler Systems

(1) All completed and approved applications for examination shall be filed with the Bureau 30 days before the day of examination.

(2) Every applicant for a journeyman's sprinkler license must be a high school graduate or possess a state equivalency certificate. Furthermore, each applicant:

(a) Shall have worked for not less than 8,000 hours in Massachusetts as an apprentice or trainee and have successfully completed not less than 144 hours of study for each year of the term of apprenticeship. The sprinkler training course must be approved by this bureau and shall consist of practical, shop-related work; all N.F.P.A. standards related to Fire Protection and State Codes; (related instruction classes, correspondence courses, or other specially designed curriculum, any of which must be approved by this bureau is considered acceptable in satisfying this requirement) OR

(b) may be admitted for examination as a journeyman by a majority vote of the Bureau of Pipefitters, Refrigeration Technicians, and Sprinkler Fitters:

1. by possessing qualifications other than those specified herein; or

2. by possessing a sprinkler fitter's license or certificate from any other state or foreign country without serving the required time as an apprentice as specified in 528 CMR 11.00.

(3) Candidates for examination must pass a written examination and must receive 70% or better to qualify for a license.

(4) For the purpose of computing the requirement for a student or graduate of a sprinkler fitter technician course accredited by a recognized State or Federal accrediting agency or licensed by the Massachusetts Department of Education, the Director of the school shall verify the transcript of the actual attendance and grade.

(5) Requirement for Contractor

(a) To become a contractor under this subtitle, an applicant must have satisfactorily passed an examination prescribed by the Department of Public Safety.

(b) Every applicant shall fulfill the following requirements:

1. Must be a citizen of the United States of America, or entitled to work in the United States of America, and at least 18 years of age;

2. Must be a person or an owner, partner, officer, or in a full time management position of a fire protection sprinkler system Contractor;

3. Must have five years of experience in the fire protection sprinkler system business in a responsible position such as managing, preparing technical drawings, or performing installation and provide written proof from his employers detailing his length of time and positions held.

a. For only an oral examination obtain (NICET Level III) certification in fire sprinkler system technology or a nationally recognized equivalent. OR

b. Must satisfactorily pass a written examination prescribed by the Department of Public Safety.

4. Must provide documentation of successfully completing a recognized course of instructions, approved by the Bureau which covers the following applicable sections of Massachusetts General Laws and Regulations for the requirements of sprinkler system installations:

M.G.L. c. 148, Fire Protection

527 CMR Board of Fire Prevention Regulations

780 CMR State Building Code

(c) Every applicant shall make application to the Department of Public Safety and pay the fees required.

REGULATORY AUTHORITY

528 CMR 11.00: M.G.L. c. 146 section 81 through 88; c. 22 section 10A

528 CMR 12.00: FIRE PROTECTION SPRINKLER SYSTEM CONTRACTOR LICENSING

12.01: Definitions

(1) Fire Protection Sprinkler Systems Contractor, A person, firm, or organization that offers to undertake the execution of contracts, the preparation of technical drawings, sale, installation, alteration, modification, inspection, maintenance, removal and repairing of any such system or any part of such system.

(2) Fire Protection Sprinkler System, A fire sprinkler system, for fire protection purposes, the work of the sprinkler fitter and apprentice shall consist of the installation of all fire protection and fire control systems, including both overhead and underground water mains, fire hydrants and hydrant mains, standpipes and hose connections to sprinkler systems, sprinkler tank heaters, back flow preventers, air lines and thermal systems, hot water fire protection systems and standpipes connected to sprinkler systems.

(3) Fire Protection Sprinkler System Contractor's License means the license issued by the Department of Public Safety to a fire protection sprinkler system contractor upon its application being approved, the fee being paid, and the satisfactory completion of the requirements of this subtitle. The license shall be issued in the name of the fire protection sprinkler contractors and the name of the license holder noted thereon.

(4) License Holder means an individual who has satisfactorily met the qualifications and has received a license from the Department of Public Safety.

(5) NICET - National Institute for Certificate of Engineering Technologies - 1420 King Street, Alexandria, VA 22314

(6) NFPA - National Fire Protection Association - Batterymarch Park, Quincy, MA 02269

12.02: Fire Protection Sprinkler Systems

No person shall engage in the preparation of technical drawings, installations, maintenance, service, or inspection of a fire protection sprinkler system or use any title, sign, card, or device indicating, or intending to indicate, or represent in any manner that he is or represents a licensed fire protection sprinkler system contractor without first obtaining the fire protection sprinkler system contractor's license.

12.03: Requirements for Fire Protection Sprinkler System Contractor's License

(1) To become a licensed fire protection sprinkler system contractor under this act, a person or firm must comply to the following:

- (a) Must have in it's full time employ a valid license holder who is a person or an owner, partner, officer or in a management position with the fire protection sprinkler system

contractor; and

(b) Make application to the Department of Public Safety, meet the requirements prescribed in this subtitle, and pay fees required.

(2) Fire Protection Sprinkler System Contractor license holders shall prominently display their Sprinkler System Contractor's license number on all commercial vehicles, offers, invoices, installation drawings, and on all stationary used in their business. The lettering of the license number required to be displayed on all commercial vehicles used in the fire protection sprinkler system contractor's business shall be visible, legible and prominently displayed on vans, trucks, and doors of stake body trucks.

(3) A license is not transferable.

(4) In no case shall a license holder be employed by more than one fire protection sprinkler system contractor at one time. If the license holder should leave the employment of the fire protection sprinkler system contractor, the contractor and the license holder must notify the Department of Public Safety within 30 days.

If the license holder should leave the employment of the fire protection sprinkler system contractor, the contractor shall have 60 days to submit a new application identifying another license holder. If such new application is not received within the allotted time, the Department of Public Safety shall revoke the license of the fire protection sprinkler system contractor. The contractor shall be permitted to complete only that work which is under contract at the time the license is revoked. No new work may be undertaken.

(5) Each application for a license shall be filed with the Department of Public Safety on a blank furnished by the Department. The fee for the first license of a contractor and for any biennial renewal thereof; or for examination therefore shall be determined annually by the Commissioner of Administration under the provision of M.G.L. c. 7, § 3 for the filing thereof. No examination will be required for a renewal.

(6) Every applicant who is to obtain a fire protection sprinkler system contractor's license shall surrender their journeyman's sprinkler license to the Department before the contractor's license will be issued. Upon renewal of the fire protection sprinkler systems contractor's license, if a fire protection sprinkler system contractor ceases to be an owner, partner, officer, or in a full time management position of a fire protection sprinkler system contractor, and that the license was not revoked or suspended, upon application, they shall automatically be re-issued a journeyman sprinklerfitters license, without examination.

Any person who has successfully obtained a fire protection sprinkler systems contractors license and was re-issued a journeyman sprinklerfitters license pursuant to 520 CMR 11.03, and while holding the journeyman sprinklerfitters license becomes an owner, partner, officer, or works in a full time management position of a fire protection sprinkler system contractor, and can provide sufficient proof to the Department that he previously held a fire protection sprinkler system contractor's license, and that those licenses were not revoked or suspended, upon application,

they shall be re-issued a fire protection sprinkler system contractor's license without re-examination.

12.04: Building, Fire Laws and Regulations

(1) Only a liensed Fire Protection Sprinkler System Contractor shall obtain a permit to install a sprinkler system in accordance with Chapter 148, Fire Prevention, Section 10A Grants and Revocation of Permits, 527 CMR Board of Fire Prevention Regulations, Section 1, Administration and Enforcement and 780 CMR, State Building Code, Chapter 9, Fire Protection Systems.

(2) Sprinkler system installations subject to the requirements of the massachusetts State Building Code 780 CMR, 527 CMR Board of Fire Prevention Regulations and M.G.L. Chapter 148, Fire Prevention shall be installed by appropriately licensed contractors and personnel in accordance with 528 CMR, 11.00 and 12.00.

(3) The permit to install a sprinkler system (12.04a) shall be revoked by the building or fire official as per their jurisdictrional authority, when a system is being installed by unlicensed personnel as per Section 12.04(a). The building/fire official shall notify the Bureau of such action.

528 CMR 13.00: PROCESS PIPING

13.01: Authorization

528 CMR 13.00 is authorized, formulated, and adopted under M.G.L. c. 22, § 10A and M.G.L. c. 146, §§ 45A and 81 through 89.

13.02: Purpose

528 CMR 13.00 is necessary to protect the lives, property, and Public Safety of the people of Massachusetts, and to help in the conservation of our natural resources and environment, by the proper installation, modification, and disassembly for re-use of process piping systems and/or equipment used to generate energy, heat, cooling, manufactured products, and for the conveyance and storage of liquids, solids, industrial gases and chemical and petroleum products.

13.03: Limit of Jurisdiction

Process piping shall be deemed to include those systems used in the conveyance, storage, and processing of liquids, solids, and industrial type gases. Nothing in 528 CMR 13.00 shall be construed as applying to the Plumbing or Sprinkler Protection industries. However, specifically included as process piping systems shall be those industrial water and waste systems which have intervening equipment or devices (*e.g.* backflow preventers, tanks, pumps) prior to tying into a domestic or sanitary system.

13.04: Scope

The Bureau of Pipefitters, Refrigeration Technicians and Sprinkler Fitters understand the engineering requirements deemed necessary for the safe design and installation of process piping systems. Therefore, all piping systems covered by 528 CMR 13.00 shall be constructed using nationally recognized standards and specifications.